

EXHIBIT K

**Analysis of Infringement of U.S. Patent No. 6,907,305 by MediaTek Inc. and MediaTek USA, Inc.
(Based on Public Information Only)**

Plaintiff Ocean Semiconductor LLC (“Ocean Semiconductor”), provides this preliminary and exemplary infringement analysis with respect to infringement of U.S. Patent No. 6,907,305, entitled “AGENT REACTIVE SCHEDULING IN AN AUTOMATED MANUFACTURING ENVIRONMENT” (the “’305 patent”) by MediaTek Inc. and MediaTek USA, Inc. (“MediaTek”). The following chart illustrates an exemplary analysis regarding infringement by Defendant NXP’s semiconductor products, systems, devices, components and integrated circuits, and products containing such circuits, fabricated or manufactured using Applied Materials, Inc.’s (“Applied Materials”) platforms, and/or framework, including Applied Materials’ Smart Factory Productivity Solution (“Smart Factory”) hardware and/or software. Such products include, without limitation, mobile devices (e.g., Helio G, Helio A, Helio P, Helio X, mid-range 4G devices, and Google Mobile Services express devices), tablet products (e.g., MiraVision), internet of things devices (e.g., i500, i350, i300A, i300B, MT3620, MT2625, MT2621, MT2601, MT2523G, MT2523D, MT2511, MT6280, MT2502, MT5931, MT3332, MT 2503, MT3333, MT3303, MT3337, and MT3339), automotive devices (e.g., Autus I20 (MT2712) devices, Autus R10 (MT2706) devices, and Autus T10 (MT2635) devices), networking and broadband devices (e.g., MediaTek T750 MT7688A, MT7628K/N/A, MT7623N/A, MT7622, MT7621A/N, MT7620N/A, RT3662, RT3883, MT7688K, MT5932, MT8167S, MT7686, MT7682, MT7697H/HD, MT7681, MT7687F, MT7697, MT7697D, MT7601E, MT7601U, MT7603E, MT7603U, MT7610E, MT7610U, MT7612E, MT7612U, MT7615, MT7615B, MT7615S, MT7662E, MT7662U, MT7668, RT3062, RT3070, RT3562, RT3573, RT3593, RT5370, RT5572, RT5592, MT3729, MT7601, MT7610, MT7630, RT5372, RT539x, RT8070, RT2870, RT2890, RT309x, RT3290, RT3370, RT3572, RT2070, RT2760, RT2770, RT2790, and RT2860), and home devices (e.g., MT8516 SoM, MT8516, MT8507, MT8502, MediaTek C4X Development Kit for Amazon AVS, MT8516 2-Mic Development Kit for Amazon AVS, MT8516, MT8693, MT8685, MT8581, MT8580, MT8563, MT8553, MT1389/G, MT1389/J, MT1389/Q, S900 (MT9950), MT9613, MT9685, MT9602, MT5592, MT5582, MT5596, MT5597, MT5580, MT5561, MT5505, MT5398, MT5396, MT1959, MT1887, MT1865, MT1862, and MT1398), flash memory and memory controllers (e.g., MT81XX SPI), and WiFi extenders (MTK7621A) and similar systems, products, devices, and integrated circuits (“’305 Infringing Instrumentalities”).

The analysis set forth below is based only upon information from publicly available resources regarding the ’305 Infringing Instrumentalities, as MediaTek has not yet provided any non-public information.

Unless otherwise noted, Ocean Semiconductor contends that MediaTek directly infringes the ’305 patent in violation of 35 U.S.C. § 271(g) by using, selling, and/or offering to sell in the United States, and/or importing into the United States, the ’305 Infringing Instrumentalities. The following exemplary analysis demonstrates that infringement. Unless otherwise noted, Ocean Semiconductor further contends that the evidence below supports a finding of indirect infringement under 35 U.S.C. § 271(b) in conjunction with other evidence of liability.

Unless otherwise noted, Ocean Semiconductor believes and contends that each element of each claim asserted herein is literally met through MediaTek’s provision or importation of the ’305 Infringing Instrumentalities. However, to the extent that MediaTek attempts to allege that any asserted claim

element is not literally met, Ocean Semiconductor believes and contends that such elements are met under the doctrine of equivalents. More specifically, in its investigation and analysis of the '305 Infringing Instrumentalities, Ocean Semiconductor did not identify any substantial differences between the elements of the patent claims and the corresponding features of the '305 Infringing Instrumentalities, as set forth herein. In each instance, the identified feature of the '305 Infringing Instrumentalities performs at least substantially the same function in substantially the same way to achieve substantially the same result as the corresponding claim element.

Ocean Semiconductor notes that the present claim chart and analysis are necessarily preliminary in that Ocean Semiconductor has not obtained substantial discovery from MediaTek nor has MediaTek disclosed any detailed analysis for its non-infringement position, if any. Further, Ocean Semiconductor does not have the benefit of claim construction or expert discovery. Ocean Semiconductor reserves the right to supplement and/or amend the positions taken in this preliminary and exemplary infringement analysis, including with respect to literal infringement and infringement under the doctrine of equivalents, if and when warranted by further information obtained by Ocean Semiconductor, including but not limited to information adduced through information exchanges between the parties, fact discovery, claim construction, expert discovery, and/or further analysis.

USP No. 6,907,305	Infringement by the '305 Accused Instrumentalities
<p>1. A method for scheduling in an automated manufacturing environment, comprising:</p>	<p>To the extent that the preamble of Claim 1 is a limitation, the Applied Materials SmartFactory Productivity Solution including SmartSched and Advanced Productivity Family (“APF”) suite (“SmartFactory”), which is used to fabricate or manufacture the '305 Infringing Instrumentalities, provides a method for scheduling in an automated manufacturing environment.</p> <p>For example, the SmartFactory includes a method for scheduling in a semiconductor manufacturing environment, as shown below:</p> <p>“SmartFactory: Dynamic Scheduling of lots across tool fleet considering future demand</p> <p>For production control and operations management personnel, decisions must be made several times an hour on how to fully use available equipment capacity, set lot priorities, and match lots and tools in order to reduce time lost for equipment setups. Without optimized scheduling, even efficient fabs fail to maximize capacity. Applied SmartSched is an optimization based scheduling system for semiconductor manufacturers that integrates lot arrival prediction with scheduling capabilities to deliver accurate production schedules every few minutes.”</p> <p>See Applied SmartFactory Scheduling Webpage, available at https://www.appliedmaterials.com/automation-software/smartsched (last visited Oct. 12, 2020).</p>

<p>detecting an occurrence of a predetermined event in a process flow;</p>	<p>The SmartFactory detects an occurrence of a predetermined event in a process flow.</p> <p>For example, Applied’s SmartFactory provides “real-time factory information to continually evaluate data from multiple manufacturing and plan floor systems—upstream and downstream:</p> <p>“ENABLE PRODUCTION SCHEDULE UPDATES Applied SmartSched is based on the current status of the factory. It uses real-time factory information to continually evaluate data from multiple manufacturing and plan floor systems—upstream and downstream. It produces up-to-the-minute production schedule updates for lots and reticles that reflect changing delivery priorities.”</p> <p>See Applied SmartFactory Scheduling Webpage, <i>available at</i> https://www.appliedmaterials.com/automation-software/smartsched (last visited Oct. 12, 2020).</p> <p>Also, Applied SmartFactory Dispatching and Reporting is advertised as being capable of “reaction to factory events in real time” and “combination and integration of multiple data sources in real time”:</p> <p>“FEATURES • Balancing of competing objectives (cycle time and throughput) • Incorporation of WIP management BKM’s from industry • Combination and integration of multiple data sources in real time • Rule execution in < 1 second based on current state of factory • Reaction to factory events in real time • KPI reporting and dashboards.”</p> <p>See Applied SmartFactory Dispatching and Reporting Datasheet, <i>available at</i> http://www.appliedmaterials.com/files/SmartFactory-Dispatching-Reporting-Solution-Brief.pdf (last visited Oct.16, 2020) (“SmartFactory Dispatching and Reporting Datasheet”).</p> <p>Applied APF RTD and Reporter also has the ability to detect and report factory events in real-time, as shown below:</p> <table border="1"> <tr> <td data-bbox="824 1209 1131 1361"> <p>✓ Real-time reporting</p> </td><td data-bbox="1131 1209 1769 1361"> <p>Offers tools for real-time and historical analysis and reporting; provides standard text-based and graphical reports as well as the ability to output in multiple formats (HTML, PDF, XLS, XML and so forth). Reports are automatically executed and distributed according to event- and time-based functionality.</p> </td></tr> </table>	<p>✓ Real-time reporting</p>	<p>Offers tools for real-time and historical analysis and reporting; provides standard text-based and graphical reports as well as the ability to output in multiple formats (HTML, PDF, XLS, XML and so forth). Reports are automatically executed and distributed according to event- and time-based functionality.</p>
<p>✓ Real-time reporting</p>	<p>Offers tools for real-time and historical analysis and reporting; provides standard text-based and graphical reports as well as the ability to output in multiple formats (HTML, PDF, XLS, XML and so forth). Reports are automatically executed and distributed according to event- and time-based functionality.</p>		

	<p>See Applied APF RTD and Reporter Datasheet, available at http://www.appliedmaterials.com/files/automation_software_resources/RTDReporterDatasheet.pdf (last visited July 21, 2020) (“RTD and Reporter Datasheet”).</p>
<p>notifying a software scheduling agent of the occurrence; and</p>	<p>The SmartFactory notifies a software scheduling agent of the occurrence.</p> <p>For example, the SmartFactory is notified of “upstream and downstream events” and “uses real-time factory information”:</p> <p>“The SmartSched system uses proprietary predictive algorithms to evaluate key aspects of the litho cell and the factory in real time. The system reacts to changing delivery priorities, and upstream and downstream events, to immediately deliver production schedule updates tailored to meet customers’ individual business objectives.”</p> <p>See “Applied Materials’ Breakthrough Predictive Scheduling System Boosts Lithography Efficiency,” <i>BusinessWire</i>, March 25, 2010, available at https://www.businesswire.com/news/home/20100325005399/en/Applied-Materials'-Breakthrough-Predictive-Scheduling-System-Boosts (last visited Oct. 12, 2020) (“BusinessWire SmartSched Press Release”).</p> <p>See also Applied SmartFactory Scheduling webpage, available at https://www.appliedmaterials.com/automation-software/smartsched (last visited Oct. 12, 2020):</p> <p>“ENABLE PRODUCTION SCHEDULE UPDATES Applied SmartSched is based on the current status of the factory. It uses real-time factory information to continually evaluate data from multiple manufacturing and plan floor systems—upstream and downstream. It produces up-</p>

	to-the-minute production schedule updates for lots and reticles that reflect changing delivery priorities.”
reactively scheduling an action from the software scheduling agent responsive to the detection of the predetermined event.	<p>The SmartFactory reactively schedules an action from the software scheduling agent responsive to the detection of the predetermined event.</p> <p>For example, the SmartSched reactively schedules actions (e.g., schedules updates) in response to predetermined events:</p> <p>“The SmartSched system uses proprietary predictive algorithms to evaluate key aspects of the litho cell and the factory in real time. The system reacts to changing delivery priorities, and upstream and downstream events, to immediately deliver production schedule updates tailored to meet customers’ individual business objectives.”</p> <p><i>See</i> “BusinessWire SmartSched Press Release” at 1.</p> <p><i>See also</i> Applied SmartFactory Scheduling Webpage, at 1:</p> <p>“ENABLE PRODUCTION SCHEDULE UPDATES Applied SmartSched is based on the current status of the factory. It uses real-time factory information to continually evaluate data from multiple manufacturing and plan floor systems—upstream and downstream. It produces up-to-the-minute production schedule updates for lots and reticles that reflect changing delivery priorities.”</p>